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ARE THE LOWER ANIMALS APPROACHING MAN?

THE remarkable advance in the mental evolution of the lower animals naturally gives rise to some propositions, viz. :

I. That many species of lower animals of to-day possess a higher mentality than primeval man; and that some species are endowed with a higher mentality to-day than the lower classes of men of to-day.

II. That the mental differences of man and the lower species are to some extent the result of training, experience, and tenacity of life.

III. That the mental future of the lower animal may become more equalized with that of man; that a method of conversing with lower animals is possible.

I.

Herodotus related 2,500 years ago that the priests of Egypt told him of the migration of the Egyptians from the East to the Nile country 10,000 years before their time. Le Plongeon, the archæological explorer, professes to have verified this story, and announces the existence of the Egyptians in Yucatan 15,000 years ago. Granted that the genesis of the history of mind must be located in Yucatan, 9,000 years before the stated time of Adam, then the 15,000 years of mysterious silence of the lower animals must be charged to man. In all that time no lower animal has arisen to tell his story and confront the human race with its annual havoc of butchery, persecution, and cruelty. In the awful silence which ever confronts him, the St. Bernard licks the hand of a master, groveling in the densest of Alpine ignorance in comparison with his own masterful intelligence; and the elephant, with a brain endowed with visible knowledge, kneels in the circus to an ignorant and contemptuous clown; and the horse, with the wonderful and highly sensitive intelligence of a Maud S., is beaten before a cart of coal by a man-shaped brute, who can neither write his name nor mention the common decencies of life. This is merely an intimation of the mentality of the lower animal. If we were to

briefly grade animals according to their mentality we would, perhaps, have a table as follows :

<i>Lowest species mentally.</i>	<i>Next higher.</i>	<i>Highest.</i>
Low and ignorant mankind.	Trained lower animals.	Educated man.
Aborigines.	Pets and some domesticated animals	
Insects.		
Many lowest animals.		

In discussing the first proposition we must measure the truthfulness of the knowledge possessed by the lower animal as compared with that of primeval man. For instance, Aristotle, in discussing natural phenomena usually assigned a supernatural explanation. A child of to-day, then, who knows practically the breeding habits of the domestic animals about him, is possessed of a higher intelligence than was Aristotle, who maintained such ridiculous doctrines as that "the eel is born of worms produced by the mud." And so, the dog that carries one's mail and does errands, that pulls one out of bed when the house is in flames, possesses a higher intelligence than the aborigines, who, with all their powers of observation, had no sense of the utility of things, whose judgement was ever biased by the supernatural, and who lived like the wild beast of the field. The same dog is naturally familiar with all things about the home and place, and knows the utility of many objects of the household. He is, then, more intelligent in this respect, if in a wealthy and refined home, than all who enter there unfamiliar with the use of the same objects and who cannot be taught the use of them. A commodore of the Chicago Yacht Club once rescued a black Newfoundland dog in mid Lake Michigan and gave him a home on the yacht *Idler*. This animal was familiar with the orders issued on shipboard, and when a command was given concerning the sails would run to the particular rope connecting, look up at the sail, bark and wag his tail. Was not this dog more intelligent in this respect than any one unfamiliar with a ship? "Bob," I think that was his name, had a habit of jumping in the lake to bathe and of barking when he desired to be helped on board the *Idler*. The sailors neglected him one day and his grand, great head was swept down in the storm. Could not the sailors of the *Idler* have better been spared? They had their opportunity in life to advance the tremendous evolution of mind going on in man and mammal but preferred the destiny of the vast army of the commonplace who lift no

hand to unveil the mystery of the infinite unknown. "Bob," with his increasing knowledge, might have become the ancestor of some future dog who should in some way communicate to us the secrets of the lower animal world.

These comparisons of the amount of knowledge possessed by certain lower animals and certain classes of men might be multiplied indefinitely. I have numerous authentic animal instances illustrating the advanced intelligence of dogs, cats, birds, and species in general; and there are books filled with them. Having shown that any lower animal having knowledge not possessed by certain classes of men is more learned in that respect, the question naturally arises as to the extent of the intelligence of lower animals.

We must concede in the light of modern times that the term "instinct" is no more applicable to the lower animal than to man, since it implies action without the aid of reason. Any training a lower animal acquires, or any knowledge or experience, is just as much learning in his case as it is in the man who has to be similarly trained or experienced. The turkey and some other animals which have become domesticated, according to Judge John D. Caton, revert to their wild state when set free. Arctic explorers and sailors when deprived of food and the conveniences of civilization often revert to aboriginal cannibalism and the lowest forms of existence; and, beyond a doubt, if they continued to be deprived of such conveniences their descendants would be as wild, dirty, savage, and ignorant as an African Pigmy. These facts show simply that instinct is as dominant in the human race as among the lowest animals, and manifests itself under like circumstances.

The opposite must then be true in part, that the knowledge which is above and relieved from instinct is partially as dominant in the lower animal as in man. Dr. Thomas Brian Gunning, whose scientific discoveries, I believe, have given him alone among Americans a fellowship in the Royal Society of Surgeons of Great Britain, once owned one of the most learned cats known. In selecting instances* of this kind I prefer to relate only those which can be verified by any one, from the lips of men whose honesty and standing cannot be questioned. "Black"

* For selected instances of lofty animal intelligence, see article entitled "Cats" in *Harper's Bazar* of October 25th, 1884, by the author.

was the name of the cat. Of his many learned qualifications it is only necessary to mention a few. He always sat at the table with the family in his own chair, with his own crockery, and with his forepaws delicately placed beside his plate. He used his paws and mouth much more deftly and politely than the masses of humanity. After an absence of several years, the family assembled at dinner one day and were surprised to see Black come forward and gravely demand, as only a cat can, his place and chair, which even they had forgotten. Black delivered the mail at the box on the corner lamp-post, and never forgot a face or friend, though years intervened between the meetings. The most remarkable of his acts occurred when a swelling appeared on his body, causing him great pain. Black was always present at surgical operations, and in this instance demonstrated that he had not been an unobservant student. His master examined his painful sore, and requested his boy to call in a young surgeon and "have the sore lanced, as he could not bear to do it."

Black heard the words, jumped on the bed, and lanced the sore with his teeth, so that the blood spurted over the coverlid. When the young surgeon came he pronounced the operation successful, and sewed up the skin. When he went away Black tore out the threads, and after that attended to the wound without interference. When the place healed there was no scar, and the surgeons agreed that they could not have performed the operation and cure without leaving one. Dr. Gunning resides at No. 21 West 21st street, New York, and will verify these incidents in person and by witnesses to those who desire.

The extent of the knowledge of lower animals must be measured by specific instances. Professional men often have cats which acquire knowledge of their professions. Alexander Hesler, of Chicago, and George C. Phelps, of New Haven, Conn., are photographers who have posing cats that are learned in most of the minutiae of the gallery. Rockwood, of Union Square, and Alman, of Fifth avenue, New York, have photographed over 3,000 dogs and cats celebrated for special knowledge and attainments. Sir John Lubbock is highly educating his dog. The circus has produced innumerable highly educated and trained dogs, horses, elephants, and other animals.

It is evident that the animal which enjoys the most constant and intimate association with educated people is most learned.

Thus the pet dogs and cats, constantly with their owners, acquire the most intelligence. Many of these are taught to be epicures, dining in the choicest way, to show disdain for vulgar people, to have a fondness for jewelry, to cast off the indecent street manners of their kind, and in every way to show a sense of refinement. One must then be ignorant, unobserving, and obstinate who still uses the term instinct as applied to *all* acts of the lower animals and will not admit that some of them have a higher mentality than primeval man and the modern scum of mankind.

II.

The photographers who possess posing cats train them to sit on the camera and amuse babes. These cats invariably succeed in making the babes laugh, smile, cry, or look interested, according as the parent wishes the child to appear in the photograph. It is well known that neither the photographer nor his assistants can often accomplish these results with infants. The trained cat is, therefore, more learned in this particular than the human being. Puss enjoys a course of training which fits her for her occupation, just as the college trains the youth for his. The untrained cat, and an animal which does not reason cannot be trained, cannot do this work any more than the untrained man can practice law. In Central Park there is a zebra which has been trained to be loving, gentle, and human in many ways; yet it has ever been asserted that the zebra is an utterly untamable animal. In tracing the history of all domestic animals we find that no species was domesticated by nature. The life history of the domestic cat and dog is of immense duration and extent. No two naturalists arrive at identical conclusions in regard to their origin. I examined all the books and data back to the time of Herodotus with interest, yet with despair. The animals soon get lost in obscurity, but students generally agree that the ancestors were once wild, like man. As to the domestic cat, I found but one dominant instinct of the wild *Felidæ* that survives, and that is a love for fish, unless we include, incidentally, the peculiar odor exuded by all of this family, not, however, an instinct. Reading in the London *Nature* an account that a British investigator had, by persistent effort, discovered that the tapering tail of the domestic cat was originally prehensile, I put the two facts

together. Was there a wild species with a prehensile tail that suspended itself from trees and caught fish from a stream? Such a cat I found in Bengal and Hindoo-stan, known as the fishing cat, *Felis viverrina*. This animal, then, probably was the ancestor of the domestic cat. Its domestication, extending through three thousand years, has only advanced its mentality beyond the prehensile use of its tail, its fishing habits, and given it such use of its mind by training and association as has been stated above. As regards the dog, I found several wild ancestors clearly proved by naturalists. The American Indian dog I had photographed side by side with the coyote, or prairie wolf. As no one can detect a particle of physical difference, it is easy to assume that the Indians domesticated their dog from the coyote, as did the Esquimaux theirs from a wild animal. Prof. Edward D. Cope has recently shown, after the most extensive examination of skeletons, particularly craniums, that the ancestor of dogs belonged to the genus *Galecygnus* in the lower miocene times, and in the upper miocene to *Canis*. Strangely enough, between these two periods one section of the dog family degenerated and became the bear; that is, the dog genus *Amphicyon* changed during the middle miocene period to the bear genus *Hyænartus*. The mentality of the dog has therefore advanced under difficulties of a natural type; it has been delayed by his vast association with the savage in all climes; and civilized man has never eradicated his most serious instincts, although he has secured some marvelous results from training. It is now known that although the talk of a parrot is somewhat artificial, yet many birds learn to understand the meaning of the words they use, and their use of them then becomes apropos. Training has done marvels for the mentality of the parrot and other birds. The crow particularly, in special instances, has been trained somewhat to the standard of an apt human intelligence.

It is difficult to estimate how far training has advanced the mentality of the lower animals, because of the shorter duration of their lives as compared to man's life. Age is not permitted to the lower orders, because of their deliberate destruction by man. The dog, however intelligent and learned he may become, is ruthlessly shot at the first indication of a disease or of madness. The cow is sent to the slaughter-house early in her career. If Maud S. breaks her leg, poor horse, the surgeon is not thought

of ; she is shot. Puss, because of her instinct to prowl, is a nightly victim ; yet it is well to mention here that many celebrated cats have been trained to forget the instinct for association with their kind. The list might be continued with profit, but enough has been given to show that the mental differences of man and the lower animals are somewhat the result of training, experience, and tenacity of life.

III.

It has been clearly established by evolutionists that man, like the domestic animal, descended through geological periods in which he had no mentality above instinct. Before he showed mental activity, man, according to the best and now agreed authorities, led by Cope, was an anthropoid ape, and before that an anthropoid lemur. In those early stages of his history, he was not even endowed with a potential mentality. But what seems the most startling in modern times is, that the human child, left to himself, according to Edward S. Morse, President of the American Association for the Advancement of Science, would be an idiot or a wild man. None of the overwhelming, vast knowledge, accumulated through ages, seems to become instinctive in the human race or is hereditarily bequeathed. The knowledge which the child acquires has to be taught him. After he learns the elementals from others he begins to use his organs of sight and hearing to add to his knowledge. What does this teach ? Simply that the lower animals are yet children, and to become learned like man, must be taught as diligently as he and from their infancy. If man has required 15,000 years to accumulate the sum total of knowledge of to-day, certainly tireless years must be spent with the lower species to advance their mentality to a state somewhat equal to his own. It is obvious from the array of visible intelligence in the modern lower animal that he can be taught much more than is known by man, together with its utility.

How can the lower animal be taught ? The best animals must first be separated from their kind, those showing the highest mentality mated with each other. Their offspring must be as carefully taught, as is the babe, such mere elements of knowledge as they are best enabled to acquire. The descendants through successive generations and through years, if necessary, must

receive the same diligent attention and teaching that has advanced the mentality of man. That the lower animal of himself has been unable to acquire knowledge by experience to such an extent as man is no reason why we should despair of his ultimate emancipation. Given the same training and advantages that man has ennobled himself with during the last several hundred years, and many lower animals would be endowed with much knowledge and its utility, and be able to converse with us.

Shall the lower animal talk? If I have shown conclusively that many lower animals have knowledge above instinct, greater in extent than those men who are unlearned, then it is proof presumptive that some method can be discovered by which they can communicate with us what they know. I have no method to offer. I shall be content to so present my data that those more familiar with the lower animals can effect the result. I will simply suggest that if some one of wealth will bequeath \$100,000 to him who shall open communication with the lower animal world some dog, cat, or bird may, ere long, break the silence of ages, and teach his companions the method. In this article only simple facts, plainly obvious to all, have been advanced. The subject is so serious and humane in its import that a single psychological theory, or remark bordering on a hobby, or anything that reads like a new doctrine or "ism," or any attempt at philosophical deductions from the data advanced in connection with this, would ruin a good cause, and, perhaps, turn it to ridicule. Let those who have animals strive to advance their mental good, and eradicate their unconscious, indecent habits. A decent, well-bred lower animal is a far better citizen than an indecent, ill-mannered person.

WM. HOSEA BALLOU.